207.5 - Nonmagnetic Coating Thickness (plate form)

These SRMs are suitable for calibrating instruments used in the measurement of organics and nonmagnetic inorganic coatings over steel. They consist of fine grained copper of varying thicknesses electrodeposited onto low carbon steel substrates having the properties of AISI 1010 steel. These uniform coatings are then overplated with a thin protective layer of chromium and the total coating thickness is then certified. The thickness range covered is between 6 µm and 2000 µm. Each unit is also supplied with a blank substrate. **NOTE:** Based on the stability of the coating, wear is the primary factor in determining if a copper on steel SRM needs reverification. If excessive wear is suspected, contact the NIST Electrochemical Processing at: Phone: (301) 975-6400; Fax: (301) 926-7679 or e-mail: coating.thickness@nist.gov

Technical Contact:hilary.gates@nist.gov

PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

			Coating Thickness, nominal	
SRM	**Description**	**Unit Size**	**(mils)**	**(µm)**
1358b	Coating Thickness Standard, (Nonmagnetic Coating on Steel)	set (4)	0.8, 3.1, 9.8, 39?	20, 80, 255, 1000?
1359b	Coating Thickness Standard (Cu & Cr Coating on Steel)	set (4)	2.0, 5.5, 20, 32 ?	48, 140, 505, 800?
1361b	Coating Thickness Standard (Cu & Cr Coating on Steel)	set (4)	0.2, 0.5, 1.0, 2.0?	6, 12, 25, 48?
1362b	Coating Thickness Standard (Cu & Cr Coating on Steel)	set (4)	1.6, 3.1, 5.5, 7.9?	40, 80, 140, 205?
1363b	Coating Thickness Standard (Nonmagnetic Coating on Steel)	set (4)	9.8, 16, 20, 26?	255, 385, 505, 635?
1364b	Coating Thickness Standard (Cu & Cr Coating on Steel)	set (4)	32, 39, 59, 79?	800, 1000, 1525, 1935?